When our wells are operating, the pumped groundwater contains nitrate at levels that exceed one-half the maximum contaminant level (MCL). The wells only operate when the nitrate is less than the MCL. Frequent testing of the well water is required by the DDW to verify that the water served to our customers never exceeds the MCL. The source of the elevated nitrate could be septic tanks or nitrogen fertilizers. Nitrate in drinking water at levels above the MCL of 45 milligrams-per-liter is a health risk for infants of less than six months of age. High nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen resulting in a serious illness; symptoms include shortness of breath and blueness of the skin. High nitrate levels may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. If you are caring for an infant or you are pregnant, you should ask advice from your health care provider, or choose to use bottled water for mixing formula and juice for your baby.

Arsenic is an element that occurs in the earth's crust. Accordingly, there are natural sources of exposure. While your drinking water meets the current standard for arsenic, it does contain low levels of arsenic. The drinking water standard balances the current understanding of arsenic's possible health effects against the cost of removing arsenic from drinking water. The DDW continues to research the health effects of low levels of arsenic, which is known to cause cancer at high concentrations and is linked to other health effects such as skin damage and circulatory problems. The USEPA established a maximum contaminant level for arsenic of 50 parts per billion in 1975. In January 2002, USEPA finalized a new standard for arsenic in drinking water that requires public water suppliers to reduce arsenic to 10 parts per billion. Groundwater and imported water supplies in the La Cañada Irrigation District service area generally range between non-detectable levels and 6 parts per billion.

Definitions of terms used in the water quality charts:

- **Public Health Goal** (PHG) is the level of a contaminant in drinking water below which there is no known or suspected risk to health. PHGs are set by the California Environmental Protection Agency.
- **Maximum Contaminant Level Goal** (MCLG) is the level of a contaminant in drinking water below which there is no known or suspected risk to health. MCLGs are set by the U.S. Environmental Protection Agency.
- **Maximum Contaminant Level** (MCL) is the highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. **Primary drinking water standards** are MCLs for contaminants that effect health along with their monitoring and reporting requirements, and water treatment requirements. **Secondary MCLs** are set to protect the odor, taste, and appearance of drinking water.
- **Regulatory Action Level** (AL) is the concentration of a contaminant which, when exceeded, triggers treatment or other requirements that a water system must follow.
- **Maximum Residual Disinfectant Level** (MRDL) is the level of disinfectant that can be added for water treatment that may not be exceeded without an unacceptable possibility of adverse health effects.
- **Maximum Residual Disinfectant Level Goal (MRDLG)** is the level of a disinfectant in drinking water below which there is no known or suspected risk to health. MRDLGs are set by the U.S. Environmental Protection Agency.
- **Treatment Techniques (TT)** Filtration is called a "treatment technique". A treatment technique is a required process intended to reduce the level of contaminants in drinking water that are difficult and sometimes impossible to measure directly.

LA CANADA IRRIGATION DISTRICT GROUNDWATER QUALITY

Chemical	MCL	PHG (MCLG)	Average Amount	Range of Detections	MCL Violation?	Most Recent Sampling Date	Typical Source of Contaminant
Radiologicals							
Alpha Radiation (pCi/L)	15	n/a	10	6.4 - 14	No	2015	Erosion of Natural Deposits
Radium (pCi/L)	5	n/a	0.05	0.01 - 0.1	No	2015	Erosion of Natural Deposits
Uranium (pCi/L)	20	0.5	6.7	5.4 - 7.9	No	2015	Erosion of Natural Deposits
Inorganic Chemicals							
Barium (ppb)	1000	2000	70	ND - 110	No	2015	Erosion of Natural Deposits
Nitrate (ppm as NO3)	45	45	41	32 - 54	No	2015	Fertilizers, Septic Tanks
Nitrate+Nitrite (ppm as N)	10	10	7.4	ND - 12	No	2015	Fertilizers, Septic Tanks
Arsenic (ppb)	10	0.004	1.9	ND - 5.9	No	2015	Erosion of Natural Deposits
Perchlorate (ppb)	6	6	ND	ND	n/a	2015	Erosion of Natural Deposits
Iron (ppb)	300	300	153.0	ND - 340	n/a	2015	Erosion of Natural Deposits
Fluoride (ppm)	2	1	0.3	0.25 - 0.33	No	2015	Erosion of Natural Deposits
Organic Chemicals							
Tetrachloroethylene PCE (ppb)	5	.4	0.4	ND - 1.2	No	2015	Industrial Solvent Discharge
Trichloroethylene TCE (ppb)	5	0.06	1.1	0.8 - 2.0	No	2015	Industrial Solvent Discharge
Secondary Standards*							
Chloride (ppm)	500*	n/a	47.9	5.7 - 76	No	2015	Erosion of Natural Deposits
Odor (threshold odor number)	3*	n/a	1	1	No	2015	Erosion of Natural Deposits
Specific Conductance (umho/cm)	1600*	n/a	697	420 - 910	No	2015	Erosion of Natural Deposits
Sulfate (ppm)	500*	n/a	82	52 - 110	No	2015	Erosion of Natural Deposits
Surfactants (MBAS) (ppb)	500*	n/a	0.1	ND - 0.23	No	2015	Found in Detergents
Total Dissolved Solids (ppm)	1000*	n/a	480	300 - 590	No	2015	Erosion of Natural Deposits
Turbidity (ntu)	5*	n/a	1.3	0.1 - 3.7	No	2015	Erosion of Natural Deposits
Unregulated Contaminants Requiring Monitoring							
Alkalinity (ppm as CaCO3)	Not Regulated	n/a	190	190 - 200	n/a	2015	Erosion of Natural Deposits
Calcium (ppm)	Not Regulated	n/a	76	49 - 90	n/a	2015	Erosion of Natural Deposits
Chromium (VI) (ppb)	Not Regulated	n/a	0.33	ND - 1.0	n/a	2015	Erosion of Natural Deposits
Hardness (ppm)	Not Regulated	n/a	327	280 - 350	n/a	2015	Erosion of Natural Deposits
Magnesium (ppm)	Not Regulated	n/a	26	17 - 30	n/a	2015	Erosion of Natural Deposits
Potassium (ppm)	Not Regulated	n/a	2.6	2.1 - 2.9	n/a	2015	Erosion of Natural Deposits
Sodium (ppm)	Not Regulated	n/a	31.3	20 - 40	n/a	2015	Erosion of Natural Deposits
Vanadium (ppb)	Not Regulated	n/a	5.6	ND - 9.9	n/a	2015	Erosion of Natural Deposits

ppb = parts-per-billion; **ppm** = parts-per-million; **pCi/L** = picoCuries per liter; **ntu** = nephelometric turbidity units; **ND** = not detected; **n/a** = not applicable; **<** = average is less than the detection limit for reporting purposes; **MCL** = Maximum Contaminant Level; **(MCLG)** = federal MCL Goal; **PHG** = California Public Health Goal; **µmho/cm** = micromho per centimeter; ***Contaminant is regulated by a secondary standard to maintain aesthetic qualities (taste, odor, color).

Lead and copper have been detected in our groundwater or imported water sources; these metals can increase when water contacts plumbing materials in your home. Because domestic plumbing is the primary source of these metals, drinking water regulations require testing tap water samples for lead and copper inside a number of representative homes every three years. If more than 10 percent of the tap samples from homes exceed the action level set by the USEPA, the water system is required to treat the water in a way that reduces the corrosiveness of the water. Testing completed in 2013 showed tap water samples with detectable lead and copper. Copper was detected below the Action Level and lead was detected in one sample above the Action Level. The next round of testing to be completed by LCID will occur in 2016. It is possible that lead levels at your home are higher than at other homes in the community as a result of materials used in your home's plumbing. Infants and young children are more vulnerable to the effects of lead in drinking water than the general population. You can minimize exposure to lead by using the first water in the morning out of your tap for something other than drinking or you can flush the water out of your tap before drinking by running the water for only a few seconds.

METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA TREATED SURFACE WATER

Chemical	MCL	PHG (MCLG)	Average Amount	Range of Detections	MCL Violation?	Typical Source of Contaminant
Radiologicals - Tested in 2015						
Alpha Radiation (pCi/L)	15	n/a	ND	ND - 4	No	Erosion of natural deposits
Beta Radiation (pCi/L)	50	n/a	5	4.0 - 6.0	No	Decay of man-made or natural deposits
Uranium (pCi/L)	20	0.43	3	2.0- 3.0	No	Erosion of natural deposits
Inorganic Chemicals - Tested in 2015						
Aluminum (ppb)	1000	60	156	88 - 200	No	Erosion of natural deposits
Arsenic (ppb)	10	0.004	2.1	2.1	No	Erosion of natural deposits
Barium (ppb)	1000	2000	122	122	No	Erosion of natural deposits
Fluoride (ppm)	2	1	0.8	0.6 - 1.2	No	Erosion of natural deposits
Fluoride (ppm)	(i)	1	0.8	0.7 - 1.2	No	Treatment Related. Water additive for dental health
Nitrate and Nitrite as N (ppm)	10	10	ND	ND	No	Agriculture runoff and sewage
Nitrate as N (ppm)	10	10	ND	ND	No	Agriculture runoff and sewage
Secondary Standards - Tested in 2015						
Aluminum (ppb)	200*	600	88	156 - 200	No	Residue from water treatment process; natural deposits
Chloride (ppm)	500*	n/a	100	98 - 102	No	Runoff or leaching from natural deposits
Color (color units)	15*	n/a	1	1 - 1	No	Runoff or leaching from natural deposits
Corrosivity (LSI)	non-corrosive	n/a	0.59	0.55 - 0.63	No	Elemental balance in water
Odor (odor units)	3*	n/a	2	2	No	Naturally occurring organic materials
Specific Conductance (µmho/cm)	1,600*	n/a	1040	1030 - 1060	No	Substances that form ions in water
Sulfate (ppm)	500*	n/a	257	252 - 261	No	Runoff or leaching of natural deposits
Total Dissolved Solids (ppm)	1,000*	n/a	660	654 - 665	No	Runoff or leaching of natural deposits
Turbidity (NTU)*	5*	n/a	ND	ND	No	Runoff or leaching of natural deposits
Unregulated Chemicals - Tested in 2015						
Alkalinity (ppm)*	Not Regulated	n/a	126	123 - 129	n/a	Runoff or leaching from natural deposits
Boron (ppb)	Not Regulated	n/a	120	120	n/a	Runoff or leaching from natural deposits
Calcium (ppm)	Not Regulated	n/a	78	77 - 78	n/a	Runoff or leaching from natural deposits
Chromium VI (ppb)	Not Regulated	n/a	ND	ND	n/a	Industry waste discharge/naturally present
Hardness, total (ppm)	Not Regulated	n/a	300	296 - 304	n/a	Runoff or leaching of natural deposits
Magnesium (ppm)	Not Regulated	n/a	27	26 - 28	n/a	Runoff or leaching from natural deposits
pH (pH units)*	Not Regulated	n/a	8.1	8.1	n/a	Hydrogen ion concentration
Potassium (ppm)	Not Regulated	n/a	4.9	4.8 - 5	n/a	Runoff or leaching from natural deposits
Sodium (ppm)	Not Regulated	n/a	100	97 - 102	n/a	Runoff or leaching from natural deposits
TOC (ppm)	Not Regulated	n/a	2.6	2.4 - 2.8	n/a	Various natural and man-made sources
Vanadium (ppb)*	Not Regulated	n/a	ND	ND	n/a	Naturally-occurring; industrial waste discharge

ppb = parts-per-billion; **ppm** = parts-per-million; **pCi/L** = picoCuries per liter; **ntu** = nephelometric turbidity units; **µmho/cm** = micromhos per centimeter;
ND = not detected; NC= not collecctd;**< =** average is less than the detection limit for reporting purposes; **MCL** = Maximum Contaminant Level; **(MCLG)** = federal MCL Goal;
PHG = California Public Health Goal; **n/a** = not applicable; **LSI** = Langelier Saturation Index; ***** Contaminant is regulated by a secondary standard.
MWDSC treats your water by adding fluoride to the naturally occurring level in order to help prevent dental caries in consumers.
The fluoride levels in the treated water are maintained within a range of 0.1 to 1.0 ppm, as required by Department regulations

Turbidity - combined filter effluent	Treatment Technique	Turbidity Measurements	TT Violation?	Typical Source of Contaminant
1) Highest single turbidity measurement	0.3 NTU	0.05	No	Soil run-off
2) Percentage of samples less than 0.3 NTU	95%	100%	No	Soil run-off

Turbidity is a measure of the cloudiness of the water, an indication of particulate matter, some of which might include harmful microorganisms. Low turbidity in Metropolitan's treated water is a good indicator of effective filtration. Filtration is called a **"treatment technique"**. A treatment technique is a required process intended to reduce the level of contaminants in drinking water that are difficult and sometimes impossible to measure directly.

LA CANADA IRRIGATION DISTRICT DISTRIBUTION SYSTEM WATER QUALITY

	MCL (MRDL/MRDLG)	Average Amount	Range of Detections	MCL Violation?	Typical Source Of Contaminant
Total Trihalomethanes (ppb)	80	31.6	25.2 - 39.2	No	Byproducts of chlorine disinfection
Haloacetic Acids (ppb)	60	12.8	7.7 - 15.8	No	Byproducts of chlorine disinfection
Chlorine Residual (ppm)	(4 / 4)	1.7	0.24 - 2.2	No	Disinfectant added for treatment
Turbidity (ntu)	5*	0.4	0.1 - 3.2	No	Erosion of natural deposits
Color (color units)	15*	3.1	3 - 7.5	No	Erosion of natural deposits
Odor (threshold)	3*	1	1	No	Usually chlorine

Four locations in the distribution system are tested monthly for odor, color and turbidity. Two locations are tested quarterly for trihalomethanes and haloacetic acids.
ntu = nephelometric turbidity units; **ND** = not detected; **MRDL** = Maximum Residual Disnfectant Level; **MRDLG** = Maximum Residual Disinfectant Level Goal;
***** Contaminant is regulated by a secondary standard to maintain aesthetic qualities (taste, odor, color)

LEAD AND COPPER ACTION LEVELS AT RESIDENTIAL TAPS

	Action Level	PHG	90th Percentile Value	Sites Exceeding AL / Number of Sites	AL Violation?	Typical Source Of Contaminant
Lead (ppb)	15	2	ND	1/ 20	No	Corrosion of household plumbing
Copper (ppm)	1.3	0.17	0.18	0 / 20	No	Corrosion of household plumbing

Every three years, 20 residences are tested for lead and copper at-the-tap. A total of 20 samples were taken in 2013. Lead was detected in one sample at a level above the Action Level.
A regulatory Action Level (AL) is the concentration of a contaminant which, if exceeded in more than 10 percent of the samples, triggers treatment or other requirements which a water system must follow
LCID is in compliance with the lead AL regulation. Copper was detected in 15 of the 20 samples, none of which exceeded the AL. The next round of required testing will occur in 2016.

La Cañada Irrigation District Urban Water Management Plan (UWMP) The California Urban Water Management Act requires each urban water supplier, with more than 3,000 service connections or providing more than 3,000 AF/Y to prepare an UWMP. La Cañada Irrigation District prepared its 2005 UWMP and submitted it to the Department of Water Resources, in accordance with the UWMP Act. LCID's UWMP was adopted on December 13, 2005, and was made available to the public for review. The Plan is filed and can be accessed in the public library and the District's main office. Today, LCID does not meet the minimum requirements for the submittal of an UWMP.

La Cañada Irrigation District Source Water Assessments A source water assessment was conducted for Wells 01 and 06 of the La Cañada Irrigation District water system in July 2002. The source is considered most vulnerable due to the following activities associated with contaminants in the water supply: automobile (gas stations), dry cleaners, drinking water treatment plants, wells (water supply), chemical/ petroleum processing/storage, historic waste dumps/landfills, injection wells/dry wells/sumps, automobile repair shops, utility stations (maintenance areas), housing (high density), parking lots/malls, septic systems (high density), appliance/electronic repair, medical/dental offices/ clinics, fertilizer, pesticide/herbicide application, motor pools, office buildings/complexes, schools, and sewer collection systems. The source is considered most vulnerable to the following activities not associated with any detected contaminants: above ground storage tanks, construction/ demolition staging areas and transportation corridors (freeways/state highways). A source water assessment was also conducted for Pickens Tunnel of the La Cañada Irrigation District water system in July 2002. The source is considered most vulnerable to the following activities not associated with any detected contaminants: managed forests and wells (water supply). A copy of the complete assessment may be viewed at: La Cañada Irrigation District 1443 Foothill Boulevard, La Cañada, CA 91011. You may request a summary of the assessment be sent to you by contacting: Douglas Caister, General Manager, at (818) 790-6749.

Metropolitan Water District of Southern California (MWDSC) Source Water Assessment "In December 2002, MWDSC completed its source water assessment of its Colorado River and State Water Project supplies. Colorado River supplies are considered to be most vulnerable to recreation, urban/storm water runoff, increasing urbanization in the watershed and wastewater. State Water Project supplies are considered to be most vulnerable to urban/storm water runoff, wildlife, agriculture, recreation and wastewater. A copy of the assessment can be obtained by contacting Metropolitan by phone at (213) 217-6850. If you have any questions, please feel free to contact:
Marcia Torobin, Metropolitan Water District of Southern California P.O. Box 54153 Los Angeles, CA 90054-0153.

(i) In the fall of 2007, MWDSC began treating your water by adding fluoride to the naturally occurring level in order to help prevent dental caries in consumers. The fluoride levels in the treated water are maintained within a range of 0.1 to 1.0 ppm, as required by Department regulations.

LA CAÑADA IRRIGATION DISTRICT
2015 ANNUAL DRINKING WATER QUALITY REPORT

Este informe contiene información muy importante sobre su agua de beber. Tradúzcalo ó hable con alguien que lo entienda bien.

La Cañada Irrigation District (LCID) serves approximately 9,500 people in the Northwest area of La Cañada Flintridge. LCID obtains drinking water from three sources – tunnel water in the Angeles National Forest watershed, two conventional vertical wells, and imported surface water purchased from the Foothill Municipal Water District. Foothill purchases water from the Metropolitan Water District of Southern California and then sells the water to various retailers in La Cañada Flintridge, La Crescenta and Altadena. The General Manager oversees the company's operations and reports to a five member Board of Directors. The Board meets at 7:30 pm every 2nd Tuesday of the month at 1443 Foothill Boulevard, La Cañada Flintridge. For more information, you may contact Mr. Douglas Caister, General Manager, at (818) 790-6749.

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (USEPA) and the California State Water Resources Control Board (SWRCB) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. SWRCB regulations also establish limits for contaminants in bottled water that provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the U.S. Environmental Protection Agency (USEPA) Safe Drinking Water Hotline (1-800-426-4791).

In 2015, La Cañada Irrigation District (LCID) distributed approximately 2,163 acre feet of water to its customers. This is equivalent to approximately seven hundred and two million gallons. One acre foot is enough water to cover one acre of land, one foot deep with water, or approximately 325,000 gallons. Less than five percent of the water came from the Picken's Canyon tunnels in the San Gabriel Mountains high above any residential area. The two tunnels closely resemble buried, horizontal mine shafts. Two conventional vertical wells produced seven percent of the annual water production. Ninety percent of the total was purchased from the Metropolitan Water District of Southern California, a regional wholesaler of imported surface water. This water is a blend of Colorado River water delivered through Metropolitan's Colorado River Aqueduct and surface water from Northern California delivered through the State of California Water Project Aqueduct. Metropolitan's water is filtered and disinfected with chlorine (followed by chloramines) at the Weymouth Filtration Plant in La Verne. Chlorine disinfectant is added to Picken's Canyon tunnel water before it blends with Metropolitan's water in lower reservoirs. Chlorine kills microorganisms and prevents re-growth of bacteria in storage reservoirs and distribution pipelines.

LCID is required by the California State Water Resources Control Board Division of Drinking Water (DDW) to test well water and tunnel water for organic chemicals, minerals, metals, and bacteria. Also, we are required to test regularly for bacteria in our distribution system. Lead and copper are tested in tap water from selected residences. Metropolitan is responsible for water quality testing of their treated water.

As in past years, the Detected Contaminant Chart compares the quality of your tap water to State drinking water standards. The water quality chart lists all the regulated drinking water contaminants (and unregulated contaminants requiring monitoring) that were detected during the 2015 calendar year. More than 100 regulated contaminants have been tested that **were not detected** in drinking water delivered by LCID; the list of non-detected contaminants is not included in the chart. Certain regulated chemicals are monitored less frequently than once each year. The results from the most recent testing done in accordance with the monitoring regulations and the respective sampling year are noted in each table. Some of the data, although more than one year old, are representative of the current drinking water quality.

In general, the sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include: 1) **microbial contaminants**, such as virus and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife; 2) **inorganic contaminants**, such as salts and metals, that can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming; 3) **pesticides and herbicides** that may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses; 4) **organic chemical contaminants**, including synthetic and volatile organic chemicals, that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, agricultural application, and septic systems; 5) **radioactive contaminants**, that can be naturally occurring or be the result of oil and gas production and mining activities. Note: In 2015, LCID's **microbial contaminant** reported two total positive samples were collected. Once notified, LCID collected supplemental samples from the two locations and those were reported as non-detect and absent for total coliform.

Groundwater is protected from many infectious organisms, such as the parasite *Cryptosporidium*, by the natural filtration action of water percolating through soils. Current conventional surface water treatment methods remove most *Cryptosporidium* organisms when they are present, but 100 percent elimination cannot be guaranteed. Metropolitan has detected *Cryptosporidium* in some areas of their watershed but has never detected the organism in their treated water. There is no evidence that *Cryptosporidium* has entered our water supply. However, some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons, such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).